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Serial No.: 08/486,070

Filed: June 7, 1995

Page 2 [Amendment Under 37 C.F.R. §1.115 (In Response To The  
September 7, 2000 Office Action - March 7, 2001)]

**AMEND THE ABOVE-IDENTIFIED APPLICATION AS FOLLOWS:**

**In The Abstract Of The Disclosure:**

Replace the previous Abstract with the new Abstract attached hereto as  
Exhibit 1.

**In The Title:**

Change the title of the invention to:

-- Solid Support Comprising An Array of Substrate Surfaces For  
Nucleic Acid Analyses and Applications, And Other Compositions  
and Systems Employing Non-Radioactive Chemically Labeled  
Oligonucleotides or Polynucleotides --

**In The Specification:**

Page 1, line 1, delete any previous section relating to "Other Related  
Applications" and substitute or insert the following:

**-- CROSS-REFERENCE TO OTHER RELATED APPLICATIONS**

1  
This is a continuation application of U.S. Patent Application  
Serial No. 07/967,646, filed on October 28, 1992, now abandoned,  
which application is a continuation application of U.S. Patent  
Application Serial No. 07/607,347, filed on October 30, 1990, also  
abandoned. Serial No. 07/607,347 is a continuation of U.S. Patent  
Application Serial No. 07/385,986, filed on July 20, 1989, now U.S.  
Patent No. 4,994,373 issued on February 19, 1991. Serial No.  
07/385,986 is a continuation of U.S. Patent Application Serial No.  
06/732,374, filed on May 9, 1985, also abandoned, which application  
is a continuation-in-part of U.S. Patent Application Serial No.  
06/461,469, filed on January 21, 1983, also abandoned. --

Page 16, after the first full paragraph ending in "reaction, which is then  
measured colorimetrically or photometrically." insert the following:

I<sup>2</sup>  
-- This invention also provides an apparatus comprising a  
plurality of means for containing a fluid, wherein at least one of the  
means comprises (i) an immobilized polynucleotide sequence  
hybridized to a polynucleotide or oligonucleotide probe, the probe  
having covalently attached thereto, a chemical label comprising a  
signalling moiety capable of forming a soluble signal, and (ii) a soluble  
signal generated by means of the signalling moiety.

Also provided by this invention is a non-porous solid support  
having directly fixed thereto a polynucleotide sequence in hybridizable  
form. Such a support is characterized in that the polynucleotide  
sequence is hybridized to a polynucleotide or oligonucleotide probe,  
the probe having covalently attached thereto a chemical label  
comprising a signalling moiety capable of generating a soluble signal.  
Such a support is also characterized in that the support is a  
transparent or translucent support. --

In The Claims:

Cancel claims 183-318 and 325-717.

Add new claims 718-1110 as follows:

I<sup>3</sup>  
-- 718. (NEW) A solid support comprising an array of substrate surfaces, each  
substrate surface comprising at least one double-stranded nucleic acid fixed or  
immobilized thereto, wherein at least one nucleic acid strand or a sequence  
therefrom comprises one or more non-radioactive chemical labels which comprise a  
non-radioactive signaling moiety or moieties which are quantifiable or detectable,  
and wherein at least one nucleic acid strand or a sequence therefrom in one of said  
substrate surfaces is different from at least one other nucleic acid strand or a  
sequence therefrom in another substrate surface. --